CLAIMS AS AMENDED HEREIN
WITH STATUS IDENTIFIERS AND MARKINGS TO SHOW CHANGES

The following claims replace all prior versions of the claims in this application.

WHAT IS CLAIMED IS:

Claim 1 (currently amended): A method for selectively killing neoplastic tissue in a living organism, said method comprising irradiating at least a portion of said living organism in which said tissue resides with electromagnetic radiation of a wavelength that is non-ionionizing and that is absorbed preferentially by said neoplastic tissue relative to adjacent tissue, said preferential absorption due to spectral differences between (i) proteins and lipids of neoplastic tissue and (ii) proteins and lipids of normal tissue, at a sufficient intensity and for a sufficient duration that said neoplastic tissue is killed by heat generated by said radiation without substantial killing of said adjacent tissue.

Claim 2 (canceled)

Claim 3 (original): The method of claim 1 wherein said neoplastic tissue is a skin lesion.

Claim 4 (original): The method of claim 3 wherein said skin lesion is a member selected from the group consisting of dermatofibroma, seborrhoeic keratosis, actinic keratosis, keratoacan thoma, basal cell carcinoma, squamous cell carcinoma, nevus intradermalis, nevus compositus, dysplatic nevus, and lentigo maligna.

Claim 5 (original): The method of claim 1 wherein said wavelength is within a range selected from the group consisting of 1510-1610 nm, 1040-1070 nm, and 3006-3400 nm.

Claim 6 (original): The method of claim 1 wherein said wavelength is approximately 265 nm.

Claim 7 (original): The method of claim 1 wherein said electromagnetic radiation is of a magnitude and duration sufficient to cause said neoplastic tissue to rise in temperature to a target

temperature of from about 75°C to about 90°C without causing said surrounding tissue to reach said target temperature.

Claim 8 (original): The method of claim 1 comprising conveying said radiation to a treatment site within said living organism through a member selected from the group consisting of fiber optics, light pipes and wave guides inserted into said organism.

Claim 9 (withdrawn): A method for deactivating enzymes in living tissue, said method comprising irradiating said tissue with electromagnetic radiation of a wavelength that is absorbed by said enzymes preferentially relative to molecules of said tissue other than said enzymes, at a sufficient intensity and for a sufficient period of time that said enzymes are denatured by heat generated by said radiation without substantial denaturation or damage of said other molecules.

Claim 10 (withdrawn): The method of claim 9 wherein said irradiation is performed sufficiently to cause irreversible denaturation of said enzymes.

Claim 11 (withdrawn): The method of claim 9 wherein said wavelength is selected by comparing absorption spectra of said enzymes and of said molecules of said tissue other than said enzymes to identify a wavelength at which said enzymes will absorb said electromagnetic radiation preferentially relative to said other molecules.

Claim 12 (withdrawn): A method for sterilizing an object made of a material of construction comprising synthetic polymer selected from the group consisting of polyethylene, polystyrene, and polypropylene that has been in contact with biological material, said method comprising irradiating said object with electromagnetic radiation at a wavelength that is selectively absorbed by covalent O-H bonds to dehydrate any glucose present on said object without causing substantial change to the molecular structure of said synthetic polymer.

Claim 13 (withdrawn): The method of claim 12 wherein said wavelength is within the range of from about 2.8 microns to about 3.3 microns.

Claim 14 (withdrawn): A method for sterilizing an object made of a material of construction comprising silicone, said method comprising irradiating said object with electromagnetic radiation at a wavelength that is selectively absorbed by covalent N-H bonds to decompose proteinaceous matter on said object without causing substantial change to the molecular structure of said silicone.

Claim 15 (withdrawn): A method for sterilizing an object that has been in contact with biological material, to render said object non-bioreactive, said method comprising irradiating said object with electromagnetic radiation at a wavelength that is selectively absorbed by a bio-reactive substance member selected from the group consisting of RNases, DNases, pyrogens, and nucleic acids at a sufficient intensity and a sufficient period of time to decompose any of bio-reactive substance adhering to said object without causing substantial change to the molecular structure of said material of said object.

Claim 16 (withdrawn): A method for the treatment of mammalian tissue infected with a microorganism, said method comprising irradiating said mammalian tissue with electromagnetic radiation of a wavelength that is preferentially absorbed by a component of a cell of said microorganism relative to said mammalian tissue at a sufficient intensity and for a sufficient duration to deactivate said microorganism.

Claim 17 (withdrawn): The method of claim 16 wherein said component is a peptidoglycan.

Claim 18 (withdrawn): The method of claim 16 wherein said component is a glycocalyx.

Claim 19 (withdrawn): The method of claim 16 wherein said component is an autolysin.

Claim 20 (withdrawn): The method of claim 16 wherein said component is chitin.

Claim 21 (withdrawn): A method for the treatment of a bacterial infection in mammalian tissue, said method comprising irradiating said mammalian tissue with electromagnetic radiation

of a wavelength that is preferentially absorbed by porins relative to said mammalian tissue at a sufficient intensity and for a sufficient duration to deactivate said bacteria.

Claim 22 (withdrawn): A method for the treatment of a subject suffering from a disease condition whose proliferation is mediated by furin, said method comprising exposing said subject to electromagnetic radiation of a wavelength that is preferentially absorbed by porins relative to said mammalian tissue of a wavelength that is preferentially absorbed by said furin relative to said mammalian tissue at a sufficient intensity and for a sufficient duration to deactivate said furin.

Claim 23 (withdrawn): A method for the treatment of a foodstuff to decompose foreign matter therein, said method comprising exposing said foodstuff to electromagnetic radiation of a wavelength that is preferentially absorbed by said foreign matter relative to said mammalian tissue at a sufficient intensity and for a sufficient duration to decompose said foreign matter.